



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,816	01/22/2004	William J. Shaw	10527-455001	6207

26161 7590 09/18/2008  
FISH & RICHARDSON PC  
P.O. BOX 1022  
MINNEAPOLIS, MN 55440-1022

EXAMINER
----------

STEWART, ALVIN J

ART UNIT	PAPER NUMBER
----------	--------------

3774

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

09/18/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/762,816	<b>Applicant(s)</b> SHAW, WILLIAM J.	
	<b>Examiner</b> Alvin J. Stewart	<b>Art Unit</b> 3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-25 and 33-40 is/are pending in the application.
- 4a) Of the above claim(s) 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-25, 33 and 35-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 19-25, 33 and 35-40 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-25, 33 and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canham et al. (USPAP 2005/0048859) in view of Clere et al US Patent 6,551,352.

Canham et al. disclose a medical device with all the elements of claim 1. See [0010] and [0042] for the device including a structure that comprises a first ceramic fiber comprising a first metalloid (silicon). See [0013], [0039] and [0129] for each dimension of the first ceramic fiber being greater than one micron. See [0090] for the device being in the form of stent.

Claim 3, see [0010] and [0042] for the first metalloid being silicon and the first ceramic fiber further comprising a second metalloid, boron.

Claims 7 and 8, see [0033] for the first ceramic fiber being at least 5 microns long.

Claims 9 and 10, see [0033], [0034], [0039] and [0129] for the first ceramic fiber being at least five microns wide.

Claim 11, see [0054], [0061], [0062] and [0090] for the first ceramic fiber extending continuously along (knitted) and helically about (braided) the device.

Art Unit: 3774

Claims 14 and 15, see [0090] for the structure being tubular stent.

Claim 16, see [0010] and [0042] for a polymer carried by the structure.

Claim 18, see [0090] for a therapeutic agent.

Canham et al. disclose a medical device with all the elements of claim 19. See [0010], [0029], [0042], [0054], [0085], [0138] and [0139] for the device including a structure that comprises a ceramic fiber intertwined with a non-ceramic fiber (silk). See [0090] for the device being in the form of stent.

Claim 20, see [0013], [0039] and [0129] for each dimension of the ceramic fiber being greater than one micron.

Claims 23 and 24, see [0054], [0085], [0138] and [0139] for the ceramic fiber being knitted or woven with the non-ceramic fiber.

Claim 25, see [0090] for a therapeutic agent.

Canham et al. disclose a medical device with all the elements of claim 27. See [0010], [0042], [0085], [0138] and [0139] for the device including a structure that comprises a mixture of polymer (silk) and ceramic fibers comprising a metalloid (silicon). See [0013], [0039] and [0129] for each dimension of the fibers being greater than one micron.

Claims 28 and 29, see [0033] for the first ceramic fiber being at least 5 microns long.

Canham et al. disclose a medical device with all the elements of claim 30. See [0042] for the device including a structure that comprises a polymer first layer (polymer fiber) and a second layer (coating) comprising a ceramic fiber comprising a metalloid (silicon).

Claim 31, see [0090] for a therapeutic agent.

Canham et al. disclose a medical device with all the elements of claim 33. See [0090] for the device comprising a tubular structure in the form of a stent. See [0010] and [0042] for a polymer element on the tubular structure, wherein the polymer element comprises a ceramic fiber comprising a metalloid (silicon). See [0013], [0039] and [0129] for each dimension of the ceramic fiber being greater than one micron.

Claims 35 and 36, see [0033] and [0064] for the required ceramic fiber length.

Claims 37 and 38, see [0122] for the ceramic fiber being about 10 microns wide.

Claims 39 and 40, see [0013] for the ceramic fiber having an aspect ratio within the required range.

Canham et al discloses the invention substantially as claimed. Additionally, Canham et al discloses a silicon material capable of combined with ceramic or metal phases. However, Canham et al does not disclose a metal made of stainless steel or Nitinol.

Clerc et al teaches a stent made of a plurality of filaments intertwined together made of Nitinol capable of having a coating of ceramics, metal or metallic alloy powder for the purpose of making the stent more radiopaque.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the fiber material of the Canham reference with the Nitinol fibers of the Clerc et al reference, in order to create a self-expandable stent in order to facilitate the inserting of the stent within the blood vessel.

Regarding claim 21, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Nitinol material of the Clerc et al reference with stainless steel, since it has been held to be within the general skill of a worker in the art to select

an equivalent known element on the basis of its suitability for the intended use as a matter of obvious design choice.

NOTE: In order to overcome the rejection the Applicant's representative has to clearly disclose that the ceramic fibers and the non-ceramic fibers are two different fibers and that the ceramic fiber is not covered over the non-ceramic fiber (like a coating), as shown by the Canham et al reference.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin J. Stewart whose telephone number is 571-272-4760. The examiner can normally be reached Monday through Thursday and every other Friday from 9:00am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Isabella can be reached at 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Alvin J Stewart/

Primary Examiner, Art Unit 3774

09/11/08